

comment "I have never found a nest as I have not been in the locality when, I expect, they breed in October and November."

No nests have yet been recorded from Zambia but C. W. Benson (*in litt.*) shot a ♀ at Lochinvar on 15th February, 1961 which contained a yolking oocyte (record no. 9). I am also indebted to Mr. Benson for telling me of record no. 1.

The species inhabits chiefly dry deciduous woodlands dominated by *Colophospermum mopane* and by *Acacia* spp. However, it is not uniformly distributed. It is hardly ever found except on flat ground. K. E. Cackett of the Ministry of Agriculture tells me that in south-eastern Rhodesia he has only found it on alluvial soils and makes a number of other interesting points.

His record no. 14 was of eggs taken from a hole formed by a branch breaking away and containing a cup of grass with no feathers at all. Brooding parents were observed to back into their nest holes presumably because their long tails cannot be managed in any other way. He found that the species showed little sign of territorial behaviour or tendency to separate into obvious pairs but that on two occasions in September, when they were not breeding, they objected strongly to the Lilac-breasted Roller *Coracias caudatus* prospecting holes for possible nest sites. When inspecting nest no. 11 all the available *L. mevesii* joined in mobbing him.

To recapitulate, *L. mevesii* lays up to four faded plain blue eggs averaging 27.2 x 19.5 mm. in natural or artificial holes during the wet months December to March. The nest is a cup of dead vegetable matter without feathers.

References:

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A pair of wild-shot Mallard x Gadwall from the Solway

by JAMES M. and JEFFERY G. HARRISON

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In February, 1907, a pair of hybrid duck was shot at Skinburyness, Solway Firth, Cumberland by William Nichol, a noted wildfowler-naturalist.

The history is that this pair of birds had been observed by the shooter several times and he had identified them as hybrids between the Mallard, *Anas platyrhynchos platyrhynchos* Linnaeus and the Gadwall, *Anas strepera* Linnaeus, an observation of considerable acumen. Both birds in the field would attract the attention of a keen and knowledgeable wildfowler, whose first impression would be that they were Gadwall, for overall both resemble that species very closely.

With any less acute observer that is probably as far as a field identification would have gone, but Mr. Nichol had recognised that they were sufficiently different from Gadwall to merit further attention, so he collected both and in due course they found their way into the Carlisle Museum collection.

This pair presents an instance in which the hybrid progeny of an inter-specific cross show a broadly intermediate state between the two parent species, but as there are some features which do not closely relate to either species, a detailed description of each specimen is appended:

♂ adult.

Upper parts:

Back adjacent to neck: similar to drake Gadwall, but somewhat browner, vermiculated sepia and off white.

Mantle: similar.

Lower back: sepia, obscurely vermiculated greyish-white.

Rump: the rump and upper tail-coverts are bluish-black, though one or two of the latter are vermiculated sepia with greyish-white.

Rectrices: central pair pale brownish-sepia; the rest paler with the best part of the medial vanes whitish, vermiculated with very pale brownish-sepia; tips and outer edges whitish. In some of the outermost rectrices on both sides the outer edges to the tips are Clay-coloured (Ridgway, V., 8).

Wing: lesser and median wing-coverts are much as in drake Gadwall, but tips tinged rather more with dull rufous. Greater coverts, on the other hand show much less rufous and the broad blackish tips are not so rich. Anterior part of the speculum is of similar blackness, but shows some greenish-bronze reflection. The posterior part of the speculum is Drab Grey (Ridgway, II, 13), the lower edges bordered dusky-sepia.

Flight feathers: outer vanes and tips sepia, rest paler sepia, tinged clay-colour.

Scapulars: these are very similar to Gadwall, but rather browner and edges of median length scapulars appreciably paler. Longest uniform as in Gadwall, but browner.

Flanks: as in drake Gadwall, but tinged with brown.

Under parts:

Breast-shield: brown, but not as deep as in drake Mallard. Number of Gadwall crescents reduced and many vestigial and reduced to paired ovoid sepia spots on lower edges of breast feathers. It should be noted that these are extended on either side down on to the upper half of the flanks.

Belly: white, lower half faintly vermiculated pale greyish extending to beyond the vent.

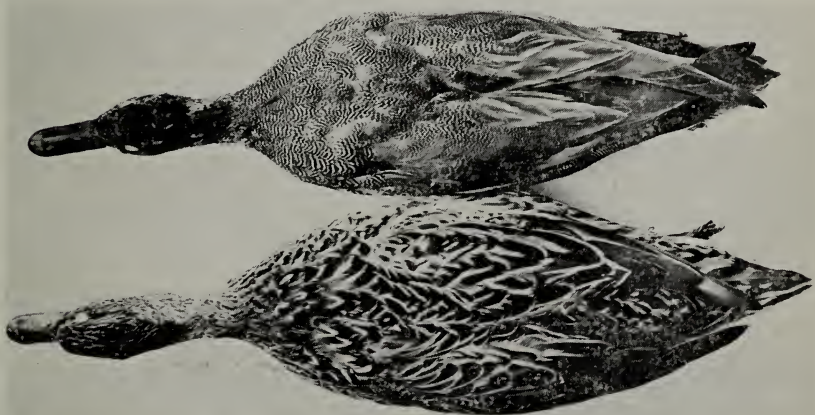
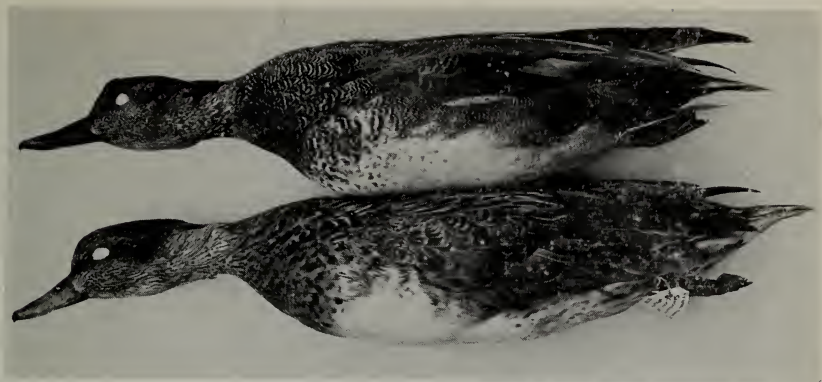
Under tail-coverts: blackish, a few brownish, vermiculated paler brownish-white.

Rectrices: pale greyish-sepia, showing pattern of upper surface faintly.

Wing: under surface, axillaries right side white, left side some white, some black; under wing-coverts, etc. white.

Flight feathers: greyish-sepia.

Head and neck: crown rather darker than in Gadwall, dully reflecting bronze. Post-ocular stripe of same colour. Rest of head and neck Isabella Colour (Ridgway III, 23), paler on throat, and finely striated sepia. At the root of the neck there is a pale clay-coloured semi-neck ring, and above this a roughly triangular patch of blackish-bronze, measuring 30 mm. x 25 mm. with the apex directed upwards. The significance of this curious character is discussed below. Bill appears to have been blackish with yellowish tip and sepia nail. Legs and toes yellowish.



Mallard x Gadwall hybrids.

♀ adult.

Upper parts: the whole of the upper parts of both parent species are very similar within the normal range of individual variation and the hybrid shows no significant differences.

Wing: lesser and median wing-coverts closely similar to those of duck Gadwall. Greater wing-coverts: proximal two thirds palest sepia with chestnut wash, distal third matt black forming a broad bar. Speculum: proximal half iridescent green, distal part matt black, bordered narrowly greyish-white. The normal white in the speculum of the duck Gadwall is in the hybrid dull french grey.

Flight feathers and scapulars: closely similar in the hybrid and both parent species.

Flanks: as in duck Gadwall.

Under parts: resemble duck Gadwall.

Wing: under surface, axillaries right side white, left side some white, some black. Under wing-coverts, etc. white.

Head and neck: very similar to duck Gadwall, except that the chin and throat are less spotted. Bill, legs and toes appear to have been yellowish in life as in duck Gadwall.

<i>Measurements in mm.:</i>	Mallard		Hybrid		Gadwall	
	♂	♀	♂	♀	♂	♀
<i>Wing:</i>	265	235	264	261	255	246
<i>Bill:</i>						
Length	55	47	40	46	45	43
Width at nostrils	22.5	21	18	20	17	15
<i>Tarsus:</i>	46	41	39	38	43.5	35
<i>Tail:</i>	86	76	83	90	87	94

DISCUSSION

The drake is an intermediate type hybrid and on general characters is nearer Gadwall than Mallard. The upper parts however, are generally rather browner and the crown somewhat darker than in the Gadwall.

The dark speculum in the hybrid reflects greenish-bronze, but lacks the violet and the white edges of the Mallard. The conspicuous white posterior part of the Gadwall's speculum is grey in the hybrid. Below, the breast-shield is considerably browner and tends to be more spotted on its lower border than in a Gadwall with its typical crescents.

The most striking character, however, is the triangular blackish-bronze marking on the neck anteriorly, immediately above the pale chestnut semi-ring. This feature was noted in precisely the same location in the Mallard x Pintail x Gadwall trigen (Harrison, J. M. and J. G. *antea* 1965). The significance of this character is by no means clear, but would appear to be derived from the Mallard, as it was present in the trigen referred to above.

The pale chestnut semi-neck ring has been recorded by us not infrequently as a variant character as seen in drake Gadwall. (Harrison, J. M. and J. G. *antea* 1963). The duck could well be mistaken for a duck Gadwall, except for the changes seen in the speculum. These show the anterior part of the speculum black, strongly reflecting green, but lacking white edges. The posterior white part of the speculum has, as in the drake,

become grey. The greater wing-coverts are broadly tipped sooty black as in the Gadwall. A further inexplicable feature in both hybrids is the presence of a few completely black axillaries on the left side only. The inference of this is that both birds are from the same brood, which would be highly likely.

SUMMARY

This paper describes a pair of wild Mallard x Gadwall hybrids. In almost all characters the birds demonstrate the principle that in some hybrids the characters are intermediate, with the exception of the curious blackish neck marking shown by the drake, and the presence of unilateral black axillaries in both hybrids.

ACKNOWLEDGMENTS

We are very grateful to Mr. Ernest Blezard, Keeper of Zoology at the Carlisle Museum for the loan of the two hybrids and to his assistant, Allan Allison, who so skilfully reduced the two specimens to skins from their original mounted state. We are also much indebted to Dr. Pamela Harrison for the photographs illustrating this paper.

References:

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On the Kori Bustard, *Ardeotis kori* (Burchell) in north-western Tanzania

by A. M. MORGAN-DAVIES

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In the Serengeti National Park, where much of these observations were made, the Kori Bustard is a common species of the open plains between Seronera and the Ngorongoro Crater Highlands. The breeding season commences approximately with the onset of the long rains about February and continues till about early May, by which time most eggs will have hatched. On the 12th May 1965, I found two young that were probably not more than five days of age. The suspicious behaviour of the female, by walking in a crouched attitude, assured me she must have either eggs or young near at hand. We searched the area for twenty minutes with no success but noting the while the parent bird had made an almost complete half circle about us at fifty yards distance. This characteristic behaviour reassured us that she must have eggs, or more probably young. As continued search proved useless we decided to remain still in the hope of picking up the call of the chicks that we now felt certain there must be as there was no sign of eggs. Within five minutes we heard the faint but unmistakable call of a young bird close at hand and by slowly moving up after each successive call we came upon two downy chicks, whose cryptic coloration was so good it was only possible to see them at a distance of a few feet. Although the long rains had been over for but a few weeks, the countryside was already drying and the speckled tawny and black colouring of the chicks blended in well with the drying grass and black-cotton soil.

Mackworth-Præd and Grant (1957) have noted as being unrecorded,